This amendment is responsive to the final Office Action mailed June 11, 2010. Claims 1-22, 24, and 26-41 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ferstenberg et al. (U.S. 6,968,318) in view of Keiser et al. (U.S. 6,505,174). Applicant respectfully submits that the claim rejections are in error and should be withdrawn for at least the following reasons.

<u>Claim Amendments</u>

Minor amendments have been made to Claims 2, 7, 9, 12, 28, 34-37, 40, and 41. Claims 2 and 28 have been amended to recite the phrase "if an improved price has not been offered." This phrase corresponds to the phrase "if an improved price has been offered" recited in Claims 1 and 27. In Claims 7, 9, 34, and 36, the term "when" has been clarified to read "if." Additionally, the preamble of Claims 34 and 40 have been amended to recite "in response to execution by a computer" in place of "if executed."

The foregoing amendments are not intended to narrow the scope of the claims nor are the amendments required for purposes of patentability. Claims 1-22, 24, and 26-41 remain pending in the application.

<u>Patentability of Claims 1-6, 17, 19, and 24</u>

The Office Action rejected Claim 1 and its dependent Claims 2-6, 17, 19, and 24 as allegedly being obvious over Ferstenberg in view of Keiser. After carefully considering the cited references and the comments provided in the Office Action, applicant submits that Claims 1-6, 17, 19, and 24 are patentable over the cited art. Ferstenberg and Keiser, considered separately and in combination, fail to teach or suggest all of the elements of Claim 1. The rejection should therefore be withdrawn.

On page 2 of the final Office Action, the Examiner cited Ferstenberg as allegedly teaching the elements of "notifying a set of first computer processes of a proposed price for buying or selling the security, wherein the set of first computer processes represents a subset of

the plurality of market participants, and wherein a trade for the security at the proposed price is not executable at the market." In this regard, the Office Action referred to Col. 45, lines 39-64; Col. 49, lines 63-67; and Col. 50, lines 1-10, of Ferstenberg.   However, the Examiner's reliance on Ferstenberg in this regard is misplaced.

At Col. 45, lines 39-64, Ferstenberg merely describes delivering price quotes via currently available "quote feeds." The prices provided by these quote feeds are *published prices*. In other words, the prices represent market prices for the financial commodities at issue. As explained by Ferstenberg at Col. 45, lines 40-43, the quote feeds "either broadcast all quotes/trades of financial commodity prices or are capable of responding to a price query only for one commodity at a time." Further, Col. 45, lines 50-52, Ferstenberg states "a database of such prices . . . provides the up-to-the-moment prices of commodities participating in the exchange." As can be readily observed, the prices that are publicly distributed in Ferstenberg are executable at a market.

Publishing prices via a quote feed as described by Ferstenberg cannot be considered equivalent to "notifying a set of first computer processes of a *proposed price* for buying or selling the security . . . wherein a trade for the security at the proposed price *is not executable at the market*," as claimed in Claim 1. (Emphasis added.) In applicant's prior response in this application, applicant noted that Claim 1 uses <u>different terms</u> to refer to a "*published* price" and a "*proposed* price." (Emphasis added.)

A review of Claim 1 clearly demonstrates that a "published price" is not the same as a "proposed price." Claim 1 explicitly recites "wherein the market participants can execute a trade for the security at the <u>published</u> price" while "a trade for the security at the <u>proposed</u> price is not executable at the market." (Emphasis added.)

Ferstenberg may teach the use of a quote feed that broadcasts market prices for buying or selling financial commodities, but Ferstenberg does <u>not</u> teach a process of "notifying a set of first

computer processes of a proposed price . . . wherein a trade for the security at the proposed price is not executable at the market," as claimed in Claim 1.

At Col. 49, lines 63-67, and Col. 50, lines 1-10 (as cited by the Examiner), Ferstenberg merely discloses alternative order-manager system architectures:

> Other order-manager system architectures can be used. For example, in an alternative in order to improve intermediary reliability by limiting external access, the ticker plant price server can be linked to the exchange driver instead of to the intermediary. Similarly, the tape reporting external interface can be linked to the exchange driver. In a different embodiment, the intermediary and the exchange driver may be combined into one process; the intermediary may establish direct connections with client interfaces in order to obtain orders and return exchange results. Also, as noted, the intermediary machine 74 can be implemented using several machines. In this case, the system configuration component of database 72 would contain the addresses and communication links between such machines, as well as the machine for each e-agent of each particular participant.

As can be observed above, Ferstenberg says nothing about "notifying a set of first computer processes of a proposed price for buying or selling the security," as claimed in Claim 1. Ferstenberg merely suggests different architectures for linking various elements in a system, such as a ticker plant price server, an exchange driver, and a tape reporting external interface.

In the "Response to Arguments" portion of the Office Action (pages 16-17), the Examiner provided no substantive explanation or rebuttal of applicant's prior arguments regarding the above-quoted portions of Claim 1. Instead, the Examiner merely stated: "The Examiner disagrees with Applicant's because the limitations were addressed as stated." However, very little of substance is stated in the Office Action. On page 2 of the Office Action, the Examiner provided no explanation as to which elements of Ferstenberg correspond to the elements of Claim 1. The Examiner only broadly cited Col. 45, lines 39-64; Col. 49, lines 63-67; and Col. 50, lines 1-10, which, as explained above, has no relevant bearing on the patentability of Claim 1.

Furthermore, Ferstenberg discloses nothing about "a first set of computer processes," which according to Claim 1 "represents a subset of a plurality of market participants." In Ferstenberg, the information provided in the quote feed at Col. 45, lines 39-64, is broadcast to *all* of the market participants.

In the "Response to Arguments" section at page 17, regarding Ferstenberg, the Office Action stated:

> Regarding [applicant's] arguments that Ferstenberg fail to teach notifying a set of first computer processes of a proposed price and notifying a set of first computer processes of a proposed price for buying or selling the security and determining whether any of the first computer processes has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying the security or lower than the proposed price for selling the security, and if an improved price has been offered, providing the improved price as a published price to the plurality of market participants
>
> The examiner points to sections of Ferstenberg where quotes/trade are broadcast and discovery of prices, and a database that provides up to the moment prices of multiple commodities and the prices information in response to queries and exchanging offers and counter offers as detailed in the present Office Action given the fact Ferstenberg specifically teaches publishing of prices and notification of prices.

However, on page 2, the Office Action already conceded that Ferstenberg fails to teach "determining whether any of the first computer processes has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying the security or lower than the proposed price for selling the security, and if an improved price has been offered, providing the improved price as a published price to the plurality of market participants." It is unclear why, in the "Response to Arguments" section, the Office Action purports to argue that Ferstenberg teaches these elements of Claim 1, when admittedly Ferstenberg does not.

Furthermore, the assertion that "Ferstenberg specifically teaches publishing of prices and notification of prices" misses the point: a "published price" according to Claim 1 is not the same as a "proposed price." Ferstenberg teaches nothing about "notifying a set of first computer processes of a *proposed price* for buying or selling the security." According to Claim 1, "a trade

for the security at the proposed price is not executable at the market." To the extent that Ferstenberg "specifically teaches publishing of prices and notification of prices," such prices are market prices that *are executable* at a market.

On pages 2-3 of the Office Action, the Examiner conceded that Ferstenberg fails to teach or suggest the elements of:

> determining whether any of the first computer processes has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying the security or lower than the proposed price for selling the security, and if an improved price has been offered, providing the improved price as the published price to the plurality of market participants.

In this regard, the Office Action relied on Keiser. However, as explained in applicant's prior response in this application, the teachings of Keiser <u>do not overcome</u> the deficiencies of Ferstenberg.

The Office Action (page 3) referred to the abstract, Col. 6, lines 45-65; Col. 27, lines 10-25; and Col. 28, lines 1-6, of Keiser, but these portions of Keiser merely reference well-known processes in which a user can execute a trade based on a *published* buy or sell price. For example, the abstract of Keiser refers to a virtual specialist program that "generates a market price." At Col. 6, lines 46-50, Keiser further explains:

> The present invention accepts buy and sell orders from traders for the derivative financial instruments, sets a market price based on the supply and demand, and participates in the market as a trader in order to minimize price volatility.

The Office Action cited Claim 22 of Keiser (at Col. 27, lines 10-25), but this portion of Keiser only describes a method in which a market price in a computerized trading system is regulated using buy-sell trading imbalances. Nowhere does Keiser teach or suggest "determining whether any of the first computer processes has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying the security or lower

than the proposed price for selling the security, and if an improved price has been offered, providing the improved price as the published price to the plurality of market participants."

The "Response to Arguments" section (page 17) states, in regard to Keiser:

> Regarding arguments that Keiser fail to teach determining whether any of the first computer processes has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying the security or lower than the proposed price for selling the security, and if an improved price has been offered, providing the improved price as a published price to the plurality of market participants, wherein the market participants can execute a trade for the security at the published price, and wherein the notifying, determining, and providing are performed by a second computer program process executing on a computer.

> The examiner points to sections of Keiser wherein matching projected price movements for trade orders by retrieving a matching security price threshold from a database and setting a projected price movement for securities therefore Keiser the setting of a projected price represent price improvement.

The Office Action appears to refer again to the text of Claim 22 of Keiser at Col. 27, lines 10-25, and alleges that "the setting of a projected price" represents "price improvement." Unfortunately, the Examiner misquotes Keiser. Keiser does not suggest setting "a projected price." Instead, Keiser refers to setting "projected *price movements*." The price movements described in Keiser have no relevance to an "improved price" for a security as claimed in Claim 1, "wherein the improved price is higher than the proposed price for buying the security or lower than the proposed price for selling the security." According to Keiser, price movements are monitored and thresholds are used to provide a "braking mechanism" for slowing price movement if the price of a security experiences "wild fluctuations." See Col. 4, lines 9-32, of Keiser.

The "Response to Arguments" section (pages 17-18) also states:

> Further claim 1 state in the preamble a computer-implemented method of providing a published price for a security, wherein the published price is available to a plurality of market participants in a

> market to execute a trade for the security, the method comprising but in
> the body of the claim there is not actual trade that is executed.

The Examiner is correct in this regard. The preamble of Claim 1 recites "[a] computer-implemented method of providing a published price for a security." It should therefore be no surprise that the body of Claim 1 refers to providing a published price for the security (by "providing the improved price as a published price to the plurality of market participants").

Indeed, according to the preamble of Claim 1, the published price is *available* to a plurality of market participants to execute a trade, but the preamble does not require that a trade be executed. The Examiner's concern that "in the body of the claim there is not actual trade that is executed" is unclear.

Applicant has demonstrated that neither Ferstenberg nor Keiser, alone or combined, teaches or suggests all of the elements of Claim 1. Therefore, applicant maintains that a *prima facie* basis for rejection of Claim 1 has not been established. The 35 U.S.C. § 103(a) rejection of Claim 1 should be withdrawn and the claim allowed.

Claims 2-6, 17, 19, and 24 depend either directly or indirectly from Claim 1 and therefore are patentable for at least the same reasons presented above with respect to Claim 1. Claims 2-6, 17, 19, and 24 are also patentable for the additional subject matter they recite which is not taught or suggested by the cited art.

Furthermore, in applicant's prior response, applicant noted that *for all the dependent claims* in the present application, the Office Action cited the same portion of Ferstenberg, namely, Col. 45, lines 39-64; Col. 49, lines 63-67; and Col. 50, lines 1-10. Applicant explained that the Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. __, ___, 82 U.S.P.Q.2d 1385, 1395-97 (2007) indicated the key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reasons why the claimed invention would have been obvious. Applicant also drew attention to M.P.E.P. § 2143 in this regard. The Examiner did not respond to these arguments. Applicant respectfully submits that the final Office Action

has again improperly relied on a blanket citation of the above portions of Ferstenberg to reject all of the dependent claims without providing a clear articulation of the reasons why the invention as claimed in each of the dependent claims would have been obvious.

For at least the foregoing reasons, applicant submits that the rejection of dependent Claims 2-6, 17, 19, and 24 is improper and should be withdrawn.

Patentability of Claims 7-11 and 26

For reasons similar to those discussed above with regard to Claim 1, Ferstenberg and Keiser fail to teach or suggest all of the elements recited in Claim 7.

For example, Ferstenberg fails to teach or suggest a method that includes "receiving a proposed price for the security from a second computer process, wherein the second computer process is providing the market, and wherein a trade for the security at the proposed price is not executable at the market." As discussed above, a "proposed price" is not the same as a "published price." The passage in Ferstenberg at Col. 45, lines 39-64, refers to market prices that are published via a quote feed. The passage in Ferstenberg at Col. 49, line 63, to Col. 50, line 10, refers to various alternative system architectures. There is no disclosure in Ferstenberg of "receiving a *proposed* price [that] . . . is not executable at the market."

Ferstenberg also fails to teach or suggest the elements of "determining whether to improve upon the proposed price for the security by offering an improved price that is higher than the proposed price for buying or lower than the proposed price for selling, and if the determination is affirmative, offering the improved price to the second computer process, which improved price can be provided by the second computer process as a published price to a plurality of market participants at the market, the published price being executable by the market participants at the market."

Conceding the above-noted deficiencies in Ferstenberg, the Office Action relied on the disclosure of Keiser. However, Keiser fails to supply the teachings that are missing in Ferstenberg. As with Claim 1, the Office Action cited the abstract, Col. 6, lines 45-65, and

Col. 27, lines 10-25, of Keiser, but these passages merely refer to well-known processes for trading securities based on published buy and sell prices. The use of buy-sell imbalances in Keiser for computing matching projected price movements does not constitute "determining whether to improve upon [a] proposed price for [a] security by offering an improved price that is higher than the proposed price for buying or lower than the proposed price for selling," as recited in Claim 7.

Keiser neither teaches nor suggests "determining whether to improve upon the proposed price for the security . . . ," and "offering the improved price to the second computer process, which improved price can be provided by the second computer process as a published price to a plurality of market participants at the market, the published price being executable by the market participants at the market."

For at least the foregoing reasons, a person of ordinary skill in the art could not combine Ferstenberg and Keiser and achieve what is claimed in Claim 7. Therefore, since the cited references do not support a *prima facie* rejection of the claim, Claim 7 should be allowed.

Claims 8-11 and 26 dependent from Claim 7 and thus are patentable for at least the same reasons presented above. Applicant further submits that Claims 8-11 and 26 are patentable for the additional subject matter they recite, which is not taught or suggested by Ferstenberg and Keiser. Claims 8-11 and 26 should be allowed.

Patentability of Claims 12-16, 18, and 20-22

Applicant respectfully submits that the Office Action has failed to establish a *prima facie* case of obviousness of Claim 12. The Office Action cited Ferstenberg and Keiser in regard to Claim 12, but Ferstenberg and Keiser do not support the claim rejection. The Office Action continues to be deficient in setting forth a factual basis that supports an obviousness rejection of Claim 12, and therefore the rejection should be withdrawn.

Notably, Ferstenberg does <u>not</u> teach a method of setting a price for a security that includes "engaging in a price discovery procedure with a set of first computer processes before

responding to a request for a current buy or sell price of the security, wherein the price discovery procedure produces a discovered price for the security" and "providing the discovered price as the current buy or sell price of the security to a plurality of market participants participating in the market, the discovered price being higher than the book buy price or lower than the book sell price."

Conceding the deficiencies of Ferstenberg with respect to the above-noted claim elements, the Office Action relied on the disclosure of Keiser. However, Keiser is also deficient with respect to the elements of Claim 12.

Disclosure of a virtual specialist program that "generates a market price" (see, e.g., the abstract of Keiser) does not constitute disclosure of a price discovery procedure that produces a discovered price that is higher than the book buy price or lower than the book sell price, as claimed in Claim 12. A current book buy price or sell price is a market price, whereas according to Claim 12, the price discovery procedure produces a discovered price that is higher than the book buy price or lower than the book sell price.

The disclosure of Keiser at Col. 6, lines 45-65, and Col. 27, lines 10-25, also fails to support an obviousness rejection of Claim 12, as Keiser does not teach or suggest the subject matter that is claimed in Claim 12.

Thus, even if Ferstenberg and Keiser were combined, which applicant expressly denies, the resultant combination does not disclose or suggest all of the elements of Claim 12. Consequently, Claim 12 is not obvious and should be allowed.

Claims 13-16, 18, and 20-22 depend from Claim 12 and thus are patentable for at least the same reasons presented above with respect to Claim 12. Applicant further submits that Claims 13-16, 18, and 20-22 are patentable for the additional subject matter they recite, which is not taught or suggested by the cited art. Accordingly, Claims 13-16, 18, and 20-22 should be allowed.

Patentability of Claims 27-33

Claim 27 is directed to a computing system for providing a published price for a security to a plurality of market participants at a market at which trades are made with respect to the security. The computing system includes "a notification component executing on at least one computer processor, wherein the notification component is configured to notify a set of the plurality of market participants of a proposed price for trading the security, and wherein a trade for the security at the proposed price is not executable at the market."

Furthermore, as claimed, the computing system includes "an evaluation component" that is configured "to determine whether any of the set of market participants has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying or lower than the proposed price for selling." If an improved price has been offered, the evaluation component is configured to "provid[e] the improved price as the published price to the plurality of market participants, . . . wherein the market participants can execute a trade for the security at the published price." The notification component is configured "to notify the set of market participants of the proposed price prior to the evaluation component providing the published price."

Applicant respectfully submits that, for at least reasons similar to those discussed above, Ferstenberg and Keiser do not disclose the computing system claimed in Claim 27. In particular, neither Ferstenberg nor Keiser teaches "a notification component . . . configured to notify a set of the plurality of market participants of a proposed price for trading the security," and "an evaluation component . . . configured to determine whether any of the set of market participants has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying or lower than the proposed price for selling, and if an improved price has been offered, then providing the improved price as the published price to the plurality of market participants." Claim 27 should thus be allowed.

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Applicant also submits that Ferstenberg and Keiser fail to teach or suggest the elements disclosed in dependent Claims 28-33, which should be allowed for at least reasons similar to those discussed above.

Patentability of Claims 34-37

Claim 34 is directed to a computer-accessible medium containing computer program instructions. In response to execution by a computer, the instructions cause the computer to participate in pricing of a security by "receiving a proposed price for the security from a computer processes, wherein the computer process is providing a market at which trades are made with respect to the security, and wherein a trade for the security at the proposed price is not executable at the market." Further, the executed instructions result in "determining whether to improve upon the proposed price for the security by offering an improved price that is higher than the proposed price for buying the security or lower than the proposed price for selling the security, and if the determination is affirmative, then offering the improved price to the computer processes." The improved price "can be provided by the computer processes as a published price to a plurality of market participants at the market, and a trade at the published price being executable by the market participants at the market."

For at least reasons similar to those discussed above with respect to Claim 7, applicant submits that the disclosures in Ferstenberg and Keiser do not teach or suggest the computer-accessible medium claimed in Claim 34. Claim 34 should thus be allowed. Additionally, Ferstenberg and Keiser fail to teach the elements disclosed in dependent Claims 35-37, and thus, Claims 35-37 should be allowed.

Patentability of Claims 38 and 39

Claims 38 and 39 are system claims written in means plus function form, and thus encompass the computer structures and equivalents thereof described in the specification that perform the recited functions. Applicant has reviewed the corresponding computer structures and algorithms for accomplishing the recited functions in view of the cited art, and submits that

Claims 38 and 39 are in allowable condition for at least the same reasons that Claims 1 and 12 are patentable over the cited art.

Patentability of Claims 40 and 41

Claim 40 is directed to a non-transitory computer-accessible storage medium containing computer program instructions for providing a published price for a security. In response to execution, the instructions cause a computer to: "notify a set of first computer processes of a proposed price for buying or selling the security, wherein a trade for the security at the proposed price is not executable at the market," "determine whether any of the first computer processes has offered an improved price for the security, wherein the improved price is higher than the proposed price for buying or lower than the proposed price for selling," and "if an improved price has been offered, provide the improved price as the published price to the plurality of market participants." The market participants "can execute a trade for the security at the published price."

Claim 41 depends from Claim 40 and recites "instructions [that] further cause the computer to compare a current book price to a most recent trade price and decide to notify the first computer processes of the proposed price when the current book price is different than the most recent trade price."

For at least reasons similar to those discussed above with respect to Claims 1 and 6, applicant submits Claims 40 and 41 are patentable over Ferstenberg and Keiser. Withdrawal of the rejections of Claims 40 and 41 is respectfully requested.

Information Disclosure Statements

As a final matter, applicant again respectfully requests consideration of the Information Disclosure Statement (IDS) that was submitted with applicant's Request for Continued Examination (RCE) on September 9, 2008. Applicant also requests consideration of the IDS submitted with applicant's prior response, which includes prosecution documents from co-pending and co-owned U.S. Application Nos. 11/469,378; 11/469,385; 11/515,362; and U.S.
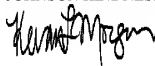
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Patent No. 7,398,244, and the IDS submitted May 24, 2010. Initialed copies of these IDSs are requested with the next action in this application.

<div align="center">CONCLUSION</div>

The disclosures of Ferstenberg and Keiser do not support a *prima facie* rejection of Claims 1-22, 24, and 26-39 under Section 103. Accordingly, allowance of the present application is proper. Applicant requests the issuance of a Notice of Allowance at an early date.

Respectfully submitted,

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